

# **Notice of Allowability**

Application No.

10/687,281

Examiner

Matthew F. DeSanto

Applicant(s)

NAKAO, NAOMI L.

Art Unit

3763

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/19/07.
2. ☒ The allowed claim(s) is/are 1-4,6, 7, 10-14,16-18,21-24,39,40 and 42-52.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## **Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 7/3/07.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Neil Sudol on July 3, 2007.

The application has been amended as follows:

1. A medical cauterization snare instrument comprising:

a tubular member;

an elongate member disposed at least partially inside said tubular member;

a resilient loop having a substantially planar fully expanded configuration of a first size attached to one end of said elongate member, said loop including a first bend on a side of said loop opposite said elongate member, said loop further including two loop sections each extending from said elongate member to said bend, at least one of said loop sections being formed with at least one notch or dent for enabling a use of said loop in at least one second size smaller than said first size upon a positioning of said loop by moving said elongate member and said tubular member relative to one another so that said notch or dent is disposed at a mouth opening of said tubular member, said two loop sections being disposed entirely outside of said tubular member in said fully expanded configuration of said loop, said one of said loop sections including, in the fully expanded configuration of said loop, a second bend or kink disposed between said first

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bend and said notch or dent, said second bend or kink defining a concavity facing towards the other of said loop sections, said loop being made of an electrically conductive material for cauterizing organic tissues of a patient, said notch or dent being so small relative to said loop that said loop in the fully expanded configuration takes the form of a single oval having a width that is substantially unaffected by said notch or dent so that said loop in the fully expanded configuration can be used to sever a polyp substantially larger than any polyp severable by said second size of said loop; and

a connector electrically linked to said loop for operatively coupling said loop to a voltage source; and

wherein each of said notches or dents includes a pair of linear segments connected to one another by an arcuate bight, said segments being disposed at an angle of approximately 80° to approximately 120° relative to one another.

Cancel Claim 5.

6. The instrument defined in claim ~~45~~ wherein said first bend is part of a nose projection of said loop, each of said loop sections including a respective second bend or kink disposed between said nose projection and the respective one of said notches or dents.

Cancel Claim 8, 9.

Cancel Claim 19.

39. A medical cauterization snare instrument comprising:

a tubular member;

an elongate member disposed at least partially inside said tubular member;

a resilient loop of a first size attached to one end of said elongate member, said loop including a first bend on a side of said loop opposite said elongate member, said loop further including two loop sections each extending from said elongate member to said bend, at least one of said loop sections being formed with at least one notch or dent for enabling a use of said loop in at least one second size smaller than said first size upon a positioning of said loop by moving said elongate member and said tubular member relative to one another so that said notch or dent is disposed at a mouth opening of said tubular member,

the notch or dent in said one of said loop sections extending toward the other loop section, said loop having a fully opened relaxed configuration wherein both said loop sections are disposed outside of said tubular member, said one of said loop sections including, in said fully expanded configuration of said loop, a second bend or kink disposed between said first bend and said notch or dent, said second bend or kink defining a concavity facing towards the other of said loop sections, said notch or dent being so small relative to said loop that said loop in the fully opened relaxed configuration takes the form of a single oval having a width that is substantially unaffected by said notch or dent so that said loop in the fully opened relaxed

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configuration can be used to sever a polyp substantially larger than any polyp severable by said second size of said loop,

said loop being made of an electrically conductive material for cauterizing organic tissues of a patient; ~~and~~

a connector electrically linked to said loop for operatively coupling said loop to a voltage source; and

wherein each of said notches or dents includes a pair of linear segments connected to one another by an arcuate bight, said segments being disposed at an angle of approximately 80° to approximately 120° relative to one another.

Cancel Claim 41.

47. A medical cauterization snare instrument comprising:

a tubular member;

an elongate member disposed at least partially inside said tubular member;

a resilient loop of a first size attached to one end of said elongate member, said loop including a first bend on a side of said loop opposite said elongate member, said loop further including two loop sections each extending from said elongate member to said bend, at least one of said loop sections being formed with at least one indentation or dimple for enabling a use of said loop in at least one second size smaller than said first size upon a positioning of said loop by moving said elongate member and said tubular member relative to one another so that said indentation or dimple is disposed at

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a mouth opening of said tubular member, said two loop sections being disposed entirely outside of said tubular member in said fully expanded configuration of said loop, said one of said loop sections including, in the fully expanded configuration of said loop, a second bend or kink disposed between said first bend and said indentation or dimple, said second bend or kink defining a concavity facing towards the other of said loop sections, said indentation or dimple being so small relative to said loop that said loop in the fully opened relaxed configuration takes the form of a single oval having a width that is substantially unaffected by said indentation or dimple so that said loop in the fully opened relaxed configuration can be used to sever a polyp substantially larger than any polyp severable by said second size of said loop,

said loop being made of an electrically conductive material for cauterizing organic tissues of a patient; and

a connector electrically linked to said loop for operatively coupling said loop to a voltage source; and

wherein each of said notches or dents includes a pair of linear segments connected to one another by an arcuate bight, said segments being disposed at an angle of approximately 80° to approximately 120° relative to one another.

51. A medical cauterization method comprising:

(a) providing a cauterization snare instrument including:

a tubular member;

an elongate member disposed at least partially inside said tubular member;

a resilient loop having a substantially planar fully expanded configuration of a first size attached to one end of said elongate member, said loop including a first bend on a side of said loop opposite said elongate member, said loop further including two loop sections each extending from said elongate member to said bend, at least one of said loop sections being formed with at least one notch or dent for enabling a use of said loop in at least one second size smaller than said first size upon a positioning of said loop by moving said elongate member and said tubular member relative to one another so that said notch or dent is disposed at a mouth opening of said tubular member, said two loop sections being disposed entirely outside of said tubular member in said fully expanded configuration of said loop, said one of said loop sections including, in the fully expanded configuration of said loop, a second bend or kink disposed between said first bend and said notch or dent, said second bend or kink defining a concavity facing towards the other of said loop sections, said loop being made of an electrically conductive material for cauterizing organic tissues of a patient, said notch or dent being so small relative to said loop that said loop in the fully expanded configuration takes the form of a single oval having a width that is substantially unaffected by said notch or dent so that said loop in the fully expanded configuration can be used to sever a polyp substantially larger than any polyp severable by said second size of said loop; and

a connector electrically linked to said loop for operatively coupling said loop to a voltage source; and

wherein each of said notches or dents includes a pair of linear segments connected to one another by an arcuate bight, said segments being disposed at an angle of approximately 80° to approximately 120° relative to one another;

(b) inserting a distal end portion of said tubular member into a patient, said loop being disposed inside said tubular member during the inserting of said distal end portion;

(c) thereafter ejecting said loop from said tubular member inside the patient; (d) expanding said loop to said fully expanded configuration;

(e) placing the fully expanded loop over a first polyp;

(f) thereafter withdrawing said loop in a proximal direction and thereby closing said loop about said polyp;

(g) during the closing of said loop, conducting current through said loop to sever the polyp about a base region thereof, and alternatively to steps (d)-(g):

(h) expanding said loop to said second size;

(i) placing the loop expanded to said second size over a second polyp, said first polyp being larger than said second polyp;

(j) thereafter withdrawing said loop in a proximal direction and thereby closing said loop about said second polyp; and

(k) during the closing of said loop about said second polyp, conducting current through said loop to sever the second polyp about a base region thereof.

#### **Reasons For Allowance**

2. The following is an examiner's statement of reasons for allowance:



The subject matter of the independent claims could either not be found or was not suggested in the prior art of record. The subject matter not found for claims 1, 39, 47, and 51 is a medical cauterization snare that has loop with dents or notches that control the size of the loop to enable the snare to receive a larger or a small polyp and the dents are sized and angled in a way as to not tear a large polyp and still be able to capture a small polyp.

The examiner has read through the remarks and Affidavit filed 4/19/07 and was convinced with the reasoning and arguments supplied by Mr. Sudol and Dr. Triadafilopoulos. In the Affidavit (the bottom of page 3), Dr. Triadafilopoulos provided criticality to the angle of the notches or dents (~ 90 degrees) of the instant application and how that specific structure helps to secure both a large and a small polyp.

The independent claims also include other patentable subject matter in combination with the other elements or steps of the claim not mention in the above paragraph.

The amendments were made as discussed in the interview dated 7/3/07 and as discussed in the interview summary.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew F. DeSanto whose telephone number is 571-272-4957. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick LUCCHESI can be reached on (571) 272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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July 3, 2007